

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-2 (canceled)

Claim 3. (currently amended): A method for producing a semi-conducting device comprising at least a first layer doped with a doping agent and a second layer deposited on said first doped layer in a single reaction chamber, wherein the deposition steps of said first and second layers are separated by an operation for avoiding the contamination of said second layer by the doping agent, wherein said operation comprises a dosing of the reaction chamber, having said first doped layer therein, with a vapour or gas comprising water, methanol, isopropanol or another alcohol.

Claim 4. (currently amended): A method for producing a semi-conducting device comprising at least a first layer doped with a doping agent and a second layer deposited on said first doped layer in a single reaction chamber, wherein the deposition steps of said first and second layers are separated by an operation for avoiding the contamination of said second layer by the doping agent, wherein said operation comprises a dosing of the reaction chamber, having said first doped layer therein, with a vapour or gas comprising ammonia, hydrazine or a volatile organic amine.

Claim 5 (previously presented): The method of claim 3, wherein said dosing is performed at around 0.05 to 100 mbar and between 100 and 350°C for less than 10 minutes.

Claim 6 (previously presented): The method of claim 3, wherein the doped layer is a p-doped layer.

Claim 7 (previously presented): The method of claim 3, wherein the doped layer is a n-doped layer.

Claim 8 (previously presented): The method of claim 6, wherein said operation is followed by the deposition of a buffer layer on the p-layer.

Claim 9 (previously presented): The method of claim 3, wherein said dosing is followed by a pumping at high vacuum and between 100 and 350°C for less than 5 minutes.

Claims 10-13 (canceled)

Claim 14 (previously presented): The method of claim 3, wherein said doping agent on the surface of a substrate is transformed into stable chemical compounds.

Claim 15 (previously presented): The method of claim 4, wherein said dosing is performed at around 0.05 to 100 mbar and between 100 and 350°C for less than 10 minutes.

Claim 16. (currently amended): The method of claim 4, wherein said ~~doping~~ doping agent comprises ~~trimethylborane~~ trimethylboron.